Amendments to the Specification:

Please amend the specification as follows:

Please replace the paragraph beginning on page 5, line 12 and ending on line 13 with the following amended version:

Figure 8 is a bar graph of the results of screening a (SEQ ID NO: 2) GSTA library.

Please replace the paragraph beginning on page 11, line 15 and ending on page 12, line 2 with the following amended version:

In a preferred embodiment, the peptide is derived from a cancer-associated mucin, and is in particular a MUC1 core protein. The MUC1 tandem repeat derived sequence (SEQ ID NO.: 1) GVTSAPDTRPAPGSTA, contains five O-glycosylation sites, two serines and three threonines, and is an example of a peptide that can be glycosylated according to the present invention to create a glycopeptide library. If all possible glycosylation sites in a tandem repeat are used only once in primary glycosylation with N-acetylgalactos-amine (Tn antigen), five different monoglycosylated tandem repeats result, but if glycosylation is randomized between 0 and 5 sites, there are 32 different combinations of glycosylated tandem repeats. If 0 to 5 sialic acids are then randomly added at the 6-position of the existing N-acetylgalactosamines, the possible number of glycoforms increases to 243. These will carry only combinations and varied numbers of Tn and STn. If another donor is added at each glycosylation, *e.g.*, TF along with the first and GlcNAc along with the second, a total of 16807 glycosyla-tion variants of MUC1 tandem repeat will be produced. This library will constitute more than 90% of all truncated versions (core structures) that may be associated with cancerous MUC1 mucin. These are useful as vaccine components.

Please replace the paragraph beginning on page 12, line 17 and ending on line 23 with the following amended version:

The library of (SEQ ID NO: 2) GSTA glycopeptides modeled on naturally-existing mucins, is small enough that the components can be characterized by mass spectrometry. It is therefore very useful in gaining a precise understanding of glycosylation patterns of the MUC1 core protein, which is necessary in order to design effective therapeutic vaccines and diagnostic tools.

Please replace the paragraph beginning on page 13, line 19 and ending on line 23 with the following amended version:

GSTA (SEQ ID NO: 2) is a four amino acid residue of MUC1, which has two unique sites for glycosylation, the serine residue (S) and the threonine residue (T). It is manually synthesized in solution with N-terminal Fmoc and C-terminal benzyl, with serine and threonine hydroxyls free.